

March 12, 1999

SPACE CENTER Roundup

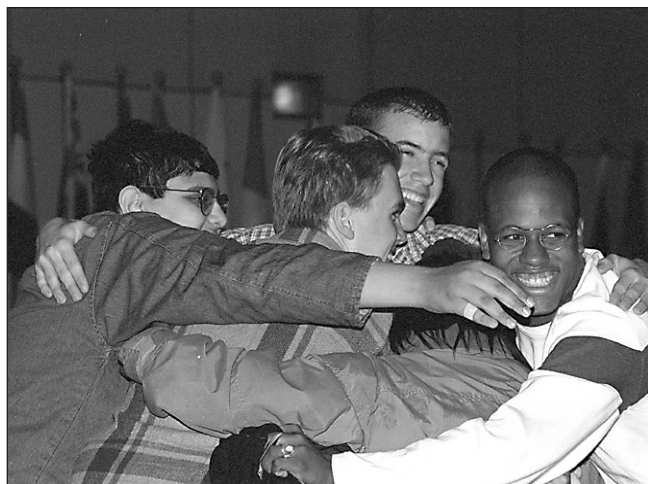
VOL. 38, NO. 4 LYNDON B. JOHNSON SPACE CENTER, HOUSTON, TEXAS



JSC Photos by James Blair S99-02568



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JSC hosts first annual Mars Design Competition

About 80 Houston area high school students took up residence at the Johnson Space Center the weekend of February 19-21, designing living and working quarters for a human settlement on Mars. They participated in the Space Settlement Design Competition, a program that began in 1984 to introduce students to the skills they will need when they join industry. The competition was the first of its kind to be held at JSC.

electrical power and water, design computer and robotics systems, specify allocation of interior space, show examples of community design, and provide estimated costs and schedules for completion of the project. To assist them, each team was provided with a manager from industry to act as the company chief executive officer.

"This project enables high school students to find out what it's like to work in the space industry, solve problems and function as a team," said Donna Fender, program manager, JSC TransHab Project Office, and CEO of the Vereinigten Flugfahrten team. "My job here is not to tell the students how to do the job but to coach them and ensure that they are headed in the right direction. I keep trying to suggest the use of an inflatable module, but I'm trying my best not to influence them too much."

"We have a very intelligent group of students here," added David Schurr, assistant to the program manager for technical development in JSC's Space Station Program Office and CEO of the Rockdonnell team.

"They are tackling something that, given sixty days, a major aerospace company would have a tough time handling, and the students are being asked to complete it in twelve hours. It's quite an undertaking."

The students divided themselves into teams and decided what their roles would be. Working with others whom they had not met before, they learned important

lessons in engineering, proposal writing, presentation skills and teamwork. All were excited to be involved in the competition.

"I'm trying to get into the Air Force Academy, the Science and Engineering College, so I thought it would be really interesting to participate in this competition," said Brett Bohn, Friendswood High School student. "Building a whole civilization on another planet is a challenge, and it's exciting to think that our ideas may contribute to what might actually happen."

Following their 35-minute presentations in the morning of the final day of the competition, the team members took a tour of JSC. The winning team, Vereinigten Flugfahrten, was announced during an awards ceremony in the afternoon.

NASA/JSC, The Boeing Co., the Clear Lake Area Economic Development Foundation's Team NASA, Clear Creek Independent School District, and the American Institute of Aeronautics and Astronautics Houston and Orange County, Calif., sections organized and hosted the competition. ■

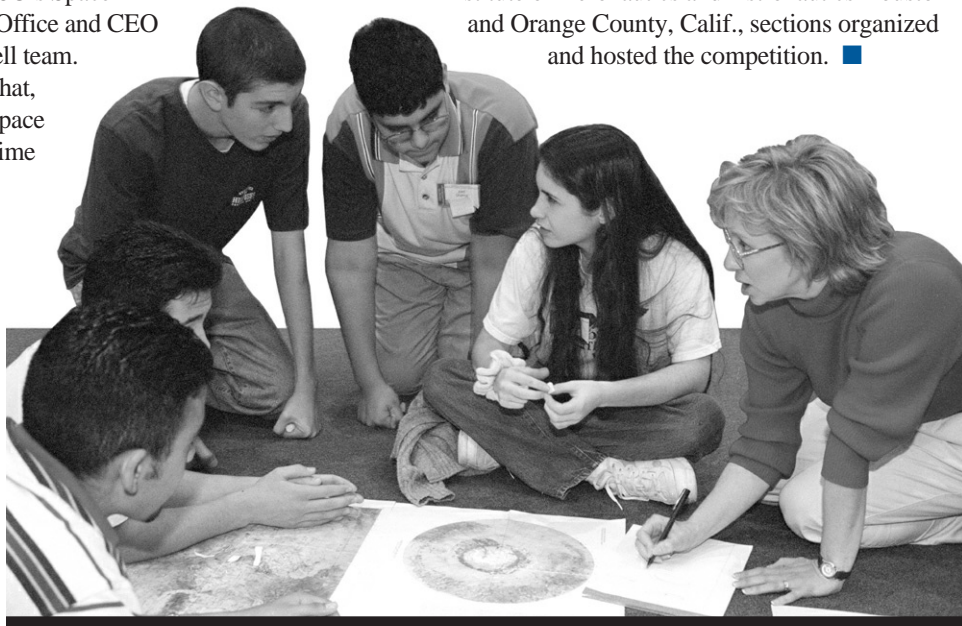


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Organized into four "company" teams (Rockdonnell, Vulture Aviation, Vereinigten Flugfahrten and Grumbo Aerospace), the students worked against a deadline to design, develop and present their concept of a human community on Mars to a panel of judges. They had to design an overall structure, define sources of construction materials, specify vehicles used for transportation, determine sources of



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SPACE SETTLEMENT DESIGN COMPETITION – Pictured left to right, top to bottom: Jon Zelon, volunteer CEO of Vulture Aviation, discusses Mars design plans with members of his team. Zelon strategizes with high school students Tania Hernandez, Reagan, and Diana Perry, Pearland. Vereinigten Flugfahrten team celebrates its victory. Rockdonnell team members Kenneth Smith, David Schurr, CEO, and Aimee Wu review their proposal. Miao Tian, Alief Elsik High School student, draws Mars community habitat for the Rockdonnell team. Donna Fender and members of the Vereinigten Flugfahrten team study map of Mars.



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to the TOP.

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Trail riders
clip-clop
through JSC.

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Actor Tom Hanks
takes tour
of Star City.

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